

PowerCat 6A U/FTP LS0H Cable Cca-s1a,d1,a1 >

The PowerCat 6A Shielded Cable is a key component of the PowerCat 6A end-to-end solution.

Molex PowerCat 6A U/FTP Cable is specifically designed to support high speed data network applications such as 10-Gigabit Ethernet (10GBASE-T). The cable is constructed of four screened pairs, with a drain wire and enclosed in a Cca-s1a,d1,a1 reaction to fire sheath. This cable minimizes alien crosstalk, provides excellent signal isolation and provides superior electromagnetic interference (EMI) protection.

Molex recommends that the full range of PowerCat 6A Shielded products be used in a system to maximize cabling performance. This system is compliant with ISO/IEC 11801 amendment 1 and ANSI/TIA-568.2-D for the support of 10GBASE-T.



FEATURES AND ADVANTAGES

Outstanding signal isolation

Enhanced performance 4 pair U/FTP LS0H cable

Resistant to alien crosstalk

Color coded for ease of termination

Reaction to Fire Euroclass: Cca - s1a,d1,a1

www.molex.com/products/copper/cat6a/

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SPECIFICATIONS

Reference information

Commercial Standards:

ISO/IEC 11801 amendment 2:2010
ANSI/TIA-568.2-D Category 6A
IEC 61156-5
RoHS compliant

Reaction to Fire:

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
IEC 60332-1, IEC 60754, IEC 61034
Euroclass Cca-s1a,d1,a1
DoP No: MLXCES-2017-C-022 located on web
<https://www.molexc.es.com/about-us/dop-certificates/>

Applications

Category 6A U/FTP Cable is intended for high speed data applications up to 500MHz including:
IEEE 802.3 10GBASE-T 10Gb/s
IEEE 802.3 1000BASE-T 1Gb/s
TIA/EIA-854 1000BASE-TX 1Gb/s
ATM 155Mb/s 155Mb/s
PoE IEEE 802.3

Mechanical

Conductor Size: 23AWG
Primary Insulation: Polyolefin
Screen material: Laminated Aluminum
Sheath Type: LS0H
Nominal OD: 7.3 +/- 0.2mm nom.
NVP: 75-77%
Screen: Each pair enclosed in laminated aluminum foil
Drain Wire: Tin-coated copper
Pulling Force: 100N maximum
Short term. bend radius: 8 x OD min
Long Term bend radius: 4 x OD min
Operating Temperature
Storage: -20°C to +75°C
Operation: 0°C to +60°C
Sheath Color: Violet RAL 4005

Electrical

Capacitance: 40 pF/m nom. @1 KHz.
DC Resistance: 77 Ω/Km max.
Propagation Delay: 514 + 36f1/2 nS/100m max @1-500 MHz
Propagation Delay Skew: 25nS/100m max.
Insulation Resistance: 60.5 GOhm/KM min.
Mean Impedance: 100Ω ± 5 @ 1-500 MHz
Voltage Rating: 72V dc maximum
Resistance Unbalance: 2% max.
Coupling Attenuation: IEC 61156-5 Type Ib
Weight per 500m reel: 26.5kg nom

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Transmission Properties and Electrical Specifications

FREQ MHz	Insertion Loss dB/100m Max.	NEXT dB Min.	PS NEXT dB Min.	EL FEXT dB/100m Min.	PS ELFEXT dB/100m Min.	RL dB Min.	DELAY nS/100m Max.	TCL dB Min.	EL-TCL dB Min.	PS ANEXT dB Min.	PS AACRF dB Min.
1	2.0	74.3	72.3	67.8	64.8	20.0	570	40.0	35.0	67.0	67.0
10	5.9	59.3	57.3	47.8	44.8	25.0	545	40.0	15.0	67.0	58.2
20	8.3	54.8	52.8	41.8	38.8	25.0	542	37.0	9.0	67.0	52.2
25	9.3	53.3	51.3	39.8	36.8	24.3	541	36.0	7.0	67.0	48.7
30	10.2	52.1	50.1	38.3	35.3	23.8	541	35.2	5.5	67.0	48.7
62.5	14.9	47.4	45.4	31.9	28.9	21.5	539	52.0	NS	65.6	42.3
100	19.0	44.3	42.3	27.8	24.8	20.1	538	30.0	NS	62.5	38.2
200	27.5	39.8	37.8	21.8	18.8	18.0	537	27.0	NS	58.0	32.2
250	31.0	38.3	36.3	19.8	16.8	17.3	536	26.0	NS	56.5	30.2
300	34.2	37.1	35.1	18.3	15.3	16.8	536	25.2	NS	55.3	28.7
400	40.0	35.3	33.3	15.8	12.8	15.9	536	24.0	NS	53.5	26.2
500	45.3	33.8	31.8	13.8	10.8	15.2	536	23.0	NS	52.0	24.2

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-0334-VL	183020023	PowerCat 6A U/FTP LS0H Cable Cca-s1a,d1,a1 Violet 500m reel

www.molex.com/products/copper/cat6a/